

## Affected Environment, Environmental Consequences, and Mitigation (Chapter 3)

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### General

**Comment:** *The affected environment, mitigation measures, and environmental consequences sections of the draft EIS are more characteristic of a programmatic EIS than the site-specific one required for this project with 1) broad, general descriptions of most affected resources rather than site-specific baseline and project information, 2) a conditional list of mitigation measures without an indication of their applicability, where they would be applied, or their effectiveness, and 3) a general and cursory assessment of the expected effects. [LTR 008]*

**Comment:** *We were surprised that the EIS presents a cursory description of the affected environment given that Bonneville has operated the corridor where the transmission line is proposed for years. The lack of information suggests that Bonneville has not historically monitored resources in the corridor. The little detailed information on resources presented in the EIS is largely derived from existing data that other agencies collected. [LTR 008]*

**Comment:** *The lack of site-specific project information, such as the proposed location of the transmission line towers, access roads, and staging areas also indicates that Bonneville has not conducted fundamental project surveys. [LTR 008]*

**Comment:** *Understandably, the lack of site specific information on resources, project elements, and mitigation measures results in an inconclusive evaluation of the environmental consequences of the project. [LTR 008]*

**Response:** The analysis of the proposed action in the draft EIS provides sufficient detail to allow a meaningful understanding of the impacts of the proposed action. The affected environment was identified by site-specific surveys and reviews of existing maps, literature, and other data for the proposed transmission line corridor. Potential impacts were identified based on the likely locations of the identified elements of the proposed action within the proposed corridor. Mitigation is identified with the level of specificity required by NEPA. Detailed documentation of the resources and impacts along the proposed transmission line was made during studies conducted during 2001. This documentation included literature review, the review and interpretation of aerial photographs, and field surveys. Data and resource information were presented in GIS and in a detailed resource data base. While there was some reliance on information for other studies, a majority of the detailed resource information was derived from the aquatic resource, wetlands, wildlife, cultural, visual resources, land use, and vegetation field surveys conducted during 2001. Impacts were quantified using GIS analysis. The detailed resource information will be used during preparation of the Mitigation Action

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Plan for the alignment during which time the conditional list of mitigation measures will be applied on a site-specific basis.

Please note that the Mitigation Action Plan will define the site-specific mitigation measures to be implemented based on the engineering design. The specific locations of towers, roads, staging, and other project features will be established during that design phase.

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**Comment:** *The EIS lists numerous best management practices and mitigation measures without providing a context for them. Our enclosed detailed comments reference multiple instances where the EIS does not indicate if or where proposed mitigation measures would be implemented and the effectiveness of identified measures. [LTR 008]*

**Response:** Mitigation is identified with the level of specificity required by NEPA.

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**Comment:** *Moreover, conclusions in the EIS that the proposed project's effects to resources are insignificant appear unsupported. [LTR 008]*

**Response:** Bonneville believes that the analysis in the draft EIS fully supports the conclusions made in the draft EIS concerning the level of significance of potential environmental effects.

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**Comment:** *Finally, the EIS contains little discussion of the predicted cumulative impacts from the project. Consistent with the Council on Environmental Quality's guidance entitled Considering Cumulative Effects under NEPA, we recommend that the cumulative impact section be resource-based rather than project-based and that this section look at a range of impacting projects that extends beyond a sole focus on power projects. [LTR 008]*

**Response:** The commenter's preference for a certain methodology for conducting the cumulative analysis is noted. The draft EIS provides sufficient information concerning potential cumulative impacts to allow the decision-maker and public to understand these impacts of the proposed action. Cumulative impacts are discussed by environmental resource on pages 3-129 to 3-131 of the draft EIS. Reasonably foreseeable cumulative future development is identified on pages 3-128 to 3-129 of the draft EIS, and includes future development other than power projects.

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**Comment:** *Additionally, in light of the little information in the EIS on the affected environment, the document should include a monitoring plan that identifies monitoring objectives (e.g., implementation of mitigation measures or effectiveness of mitigation measures), states how monitoring would be carried out and data used, and lists*

*appropriate mitigation measures to employ if monitoring reveal unsatisfactory environmental effects. [LTR 008]*

**Comment:** *EPA additionally recommends a monitoring strategy for resources that provides a feedback loop for correcting project effects deemed to be unacceptable. [LTR 008]*

**Response:** The draft EIS provides sufficient detail about the affected environment for the proposed transmission corridor. Information about the affected environment was identified through site-specific surveys and reviews of existing maps, literature, and other data for the proposed corridor. In addition, the potential mitigation that is identified in the draft EIS is discussed with the level of specificity required by NEPA. Bonneville has taken a hard look at possible mitigation measures and the draft EIS contains a reasonably complete discussion of mitigation measures. Because there is sufficient information in the draft EIS concerning the affected environment and potential environmental effects and mitigation measures, preparation of the type of monitoring plan suggested by the commenter is not necessary. However, Bonneville will develop a mitigation action plan that will be used during construction to ensure that all adopted mitigation measures are applied to the project.

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**Comment:** *In conclusion, proposing to place a new transmission line in an existing transmission line corridor would appear to minimize impacts. NEPA, however, requires Bonneville to take a hard look at the elements of the proposed project including the need for the project, a full range of reasonable alternatives (including those outside the jurisdiction of the lead agency if appropriate), a site-specific discussion of mitigation measures and their effectiveness, and a sufficient discussion of the affected environment and environmental consequences so that the decision maker and public can contrast and compare alternatives. [LTR 008]*

**Response:** Comment noted. Please see the previous responses regarding the need for the proposed action, alternatives to the proposed action, and the adequacy of the affected environment, environmental consequences, and mitigation measure discussions in the EIS.

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**Comment:** *BLM has not yet received specific resource inventory reports for archaeology and vegetation surveys (including both rare plants and noxious weeds). From the discussion in the DEIS, it appears that not all of the inventories have been completed. These reports are necessary to adequately assess impacts of the project. Without them, both the affected environment and environmental consequences sections of Chapter 3 are incomplete....prior to writing the final EIS, these inventories must be completed and the reports provided to BLM for review. The BLM also needs to receive copies of any Biological Assessment(s) prepared for the project. [LTR 007]*

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**Response:** The Cultural Resources Technical Report, which has details regarding impacts and mitigations measures for cultural resources, has been sent to the affected Tribes, Federal land managing agencies along the line, and the State Historic Preservation Officers for review and comment before being finalized.

Information regarding vegetation along the line is provided within the draft EIS; there are no further reports. The final EIS has been updated to include information due to additional surveys conducted this spring.

Bonneville will provide you with a copy of the Biological Assessment.

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### **Land Use and Recreation**

**Comment:** *The DEIS maps are small in scale, it is hard to determine for sure which [BLM] tracts would be affected by the new transmission line...In order to permit meaningful review of the proposal, higher detail maps need to be included in the document or provided directly to BLM. The maps should clearly show the BLM and COE tracts potentially affected by the...project. We recommend that these maps have a scale of 1:50,000 or better...include contour lines, proposed tower and access road locations, if possible. [LTR 007]*

**Response:** Bonneville believes that the maps provided in the EIS, along with the written analysis, provide sufficient information to allow an understanding and meaningful review of the proposed action. Regarding the BLM tracts specifically, Bonneville will meet with BLM staff to provide detailed maps and discuss the proposed project and the easements that would be required.

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**Comment:** *State is going to give up lease on Maryhill & Crow Butte Parks. [PS]*

**Response:** As of October 1, 2001, the U.S. Army Corps of Engineers holds the lease on Crow Butte State Park. The state currently holds the lease on the Maryhill Park.

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**Comment:** *We're going to lose a lot of access if they're located where they are proposed at "Sundale Orchards". [RS]*

**Response:** In a meeting with the landowner, the access road system in this location was adjusted to coincide with the existing road system through the orchard, with some widening at the corners. Some trees would have to be removed at the corner locations due to the widening, but not as many trees would need to be removed compared to the original road plan. Thank you for working with us.

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**Comment:** *If Bonneville goes through the orchard I'll have to take out trellises and trees. (Sundale Orchards) [RS]*

**Response:** Yes, as described in the impact analysis, some windbreak trees would have to be removed so that there is adequate clearance for the transmission lines. In some cases, orchard trees and vineyard trellises would also have to be removed for tower locations and access.

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**Comment:** *Can towers be shifted to get them out of the orchards? [RS]*

**Comment:** *A jog of 50-75 feet at towers 54/2 and 54/3 would solve problem of having to remove trees. [PS]*

**Response:** There is some flexibility in locating towers. Bonneville's goal would be to locate towers with the least impact possible. Additional coordination with landowners with orchards, vineyards, and irrigation circles would occur after preliminary tower design/locations has been prepared. Towers can often be moved some distance ahead or back along the centerline of the route, but tower moving can result in additional tower heights and costs. It is difficult to move towers to either side from the centerline. Jogging the line to the north of the centerline would require up to two dead-end structures and two angle structures, which would increase the costs of a single location significantly.

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**Comment:** *Don't want concrete trucks to show up during harvest! [RS]*

**Comment:** *Harvest during 2nd week of August, and 2nd week of November, working on trees in December. [RS]*

**Comment:** *Wheat harvest is from July 1st - 20th, and we plant from September 10th through November 1st. [RS]*

**Comment:** *Harvest is in September - October for Alder Ridge. [RS]*

**Comment:** *We harvest in May (alfalfa) and generally cut again at the end of June. (sheet 68) [RS]*

**Response:** Bonneville would make every effort to work with individual landowners to schedule construction activities to minimize conflicts with farming activities to the extent possible. If conflicts occur, these will be handled on a case-by-case basis.

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**Comment:** *Plans to expand orchards on either side, but permits with Department of Ecology are difficult. [RS]*

**Response:** Comment noted.

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**Comment:** *We use the barn owned by Goldendale Aluminum Company for hay. [RS]*

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**Response:** Thank you for the information. Bonneville will take it into consideration when selecting an alternative at the Hanford-John Day Junction.

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**Comment:** *Trees become severely damaged by wind, when poplars are cut fruit gets damaged. Used to have a limit of 16 ft. But the natural resource specialist allowed us to grow to 20 feet, that helps. [RS]*

**Response:** The heights of trees under and along the line can vary depending on how close they are to the corridor and to the belly of the conductor. The Bonneville Natural Resource Specialist in your area (Bill Erickson 509-527-6249) can work with you to determine appropriate safe heights of your wind break trees after the proposed line is in place.

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**Comment:** *Gates with livestock are inadvertently left open. The clock will start the minute I stop my work to remedy the situation in taking care of my cattle, due to gates being left open. [RS]*

**Response:** Thank you for the reminder. During the construction phase, Bonneville intends to replace many of the broken and barbed wire gates along the transmission line right-of-way with metal swing gates. The new gates will be easier to operate and to keep closed. We have reminded our survey crews and will give specific instructions to our construction contractors to close gates behind them. Property owners can help by placing a sign on the gate indicating that there is livestock present. This will help remind people that they are in a rangeland area.

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**Comment:** *EIS states, No "Prime Farmland", although there may be much in this area, there is some good irrigated farmland. -- Sundale Orchards [RS]*

**Response:** Prime farmland is a Federal designation based on soil type and other criteria. There is good farming land along the proposed route, although it does not meet the prime farmland criteria.

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**Comment:** *Perhaps you can place taller towers so that you can span the irrigated farmland? [RS]*

**Response:** Bonneville would work to span irrigation circles where possible. In some cases taller towers would help. Please see the discussion on working with landowners and spans of towers.

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**Comment:** *M-BE-AR-54-1, Need to reroute road around orchard, rather than through it. [RS]*

**Response:** The access road location as shown on the photomaps is not correct. It does go around the orchard to the east.

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**Comment:** *Registered block where we can grow certified plants. (i.e., disease free, etc.) near tower 33/1 [RS]*

**Response:** Thank you. Bonneville will take this information into consideration.

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**Comment:** *Irrigation at 33/1 drip system (permanent – doesn't move around). [RS]*

**Response:** Thank you. Bonneville will take this information into consideration.

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**Comment:** *We spoke with Bill Erickson at Bonneville about wind machines on our property. (near 33/1) [RS]*

**Response:** Comment noted.

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**Comment:** *The proposed 79 mi long 500 kV transmission line is to be constructed mostly in existing right-of-way. The proposed alternatives in the draft EIS do not appear to have the potential to negatively affect Bureau of Reclamation projects or facilities. [E-M 003]*

**Response:** Thank you for your review and comment.

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**Comment:** *S-9 identifies the following mitigation measures: coordinate with landowners for farm operations, including plowing, crop dusting, and harvesting. It is presumed that this mitigation measure would minimize airborne pollutants, however, timing these activities could also minimize spikes in non-point source water pollution. The EIS should indicate the resource or resources that this measure is helping to protect. [LTR 008]*

**Response:** Mitigation measures listed on page S-9 relate to land use and recreation activities, not to non-point air pollution.

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**Comment:** *Page 3-2 lists the following locations without explaining their nomenclature: 6/1, 7/2 10/4...The EIS, preferably in a sidebar, should explain the basis of this nomenclature or include a map of towers identified by this nomenclature. [LTR 008]*

**Response:** The nomenclature is described on page 2-2. Bonneville intended to reiterate the description at the beginning of Chapter 3, but it was left out, we apologize for the omission.

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**Comment:** *Pages 3-6 and 3-7 states that Umatilla County's zoning designation for the project corridor is F1, Exclusive Farm Use. A noncommercial utility facility is permitted outright in the F1, Exclusive Farm Use zone, and the proposed action thus would not be inconsistent with this designation. The EIS should define a noncommercial utility facility in this context. A transmission facility seemingly appears more of a commercial use than a residential or farm use. [LTR 008]*

**Response:** A transmission line is permitted outright in the F1, Exclusive Farm Use Zone in Umatilla County. The F1 Exclusive Farm Use Zone permits utility facilities necessary for public service except commercial facilities for the purpose of generating power for public use by sale (Section 3.012(5)). Because a transmission line transports power and does not generate power, it is considered a permitted use (Perry pers. comm.).

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**Comment:** *Concerned about interfering with plans for a home overlooking the Columbia River. [PH 005]*

**Response:** As discussed in a telephone conversation between the Bonneville engineer and the landowner, the transmission line in this area (Oregon, near the John Day Substation) would be within an existing corridor with transmission lines on either side of it and would not disrupt plans for the home.

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**Comment:** *Would like to know if the wind machines will have to moved from where they are currently located. (south of the existing corridor) [PH 006]*

**Response:** As Bonneville has discussed with the landowner/commenter, one wind machine would have to be relocated. If Corridor Mile 32, Alternative B (move corridor off Tribal allotment) is selected, then additional wind machines would have to be moved.

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**Comment:** *I have found a Bonneville employee with a hunting rifle and in a Bonneville truck on the easement area on my property in the past. I complained to the office with little result. What is Bonneville's policy concerning employees or contractors carrying guns on private property? [PH 009]*

**Response:** Bonneville's policy strictly forbids employees or the contractors from carrying weapons in their vehicles. Please notify Bonneville immediately if this happens again. For your area, please contact Mary Oakland at our Redmond District, (541) 548-4015.

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### **Geology, Soils, and Seismicity**

**Comment:** *What are we doing at 66/1? It's real steep there. [RS]*

**Response:** Bonneville is looking into routing the proposed line on top of the bluff and spanning JU Canyon to get off the steep slope.



**Comment:** *You'd have a pretty long span at 66/1 because it is so steep there. [RS]*

**Response:** Yes, the JU Canyon span will be long. However, it is easier to have long spans over canyons than on flat land because the canyon allows room for the belly of the conductor sag.

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**Comment:** *S-11 [and 3-17] contains the following mitigation measure: avoid construction on steep slopes where possible. The EIS should define steep slopes, identify where steep slopes occur in the project area, and where construction on steep slopes could and could not be avoided. [LTR 008]*

**Response:** Steep slopes are defined as slopes exceeding 45%. Areas with steep slopes are found in the southern half (Klickitat and Sherman Counties portion) of the corridor. Site-specific mitigation measures for construction on steep slopes will be addressed in the Mitigation Action Plan.

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**Comment:** *S-11 [and 3-17] contains the following mitigation measure: install appropriate roadway drainage to control and disperse runoff. The EIS should identify specific locations in the project area needing roadway drainage structures and the appropriate drainage structure(s) for each site. [LTR 008]*

**Response:** Site-specific mitigation measures relating to roadway drainage will be addressed in the Mitigation Action Plan.

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**Comment:** *Pages S-11 and 3-17 contains the following mitigation measure: develop additional mitigation measures (using a certified engineer) between corridor miles 39 and 41 due to the presence of an active landslide in the vicinity of tower 40/3. The EIS should identify specific mitigation measures. A certified engineer should evaluate the active landslide area prior to completing the EIS and appropriate mitigation measures should be included in the EIS for the public and decision-maker to review. The EIS should identify appropriate site-specific mitigation measures...[and] predict the effectiveness of the mitigation measures, and predict the risks of mass movement and erosion with project implementation (including mitigation measures). [LTR 008]*

**Response:** The area has been reviewed by a certified engineer and the text has been updated on page 3-15 and new mitigation measures added to page 3-17.

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**Comment:** *Page 3-16 states that erosion rates would most likely return to their current level following construction if plants reestablished along the corridor, naturally, or through revegetation. The EIS should predict the time it would take for plants to reestablish themselves to the extent that erosion rates would return to natural levels, the level of soil loss in the interim, differences between existing vegetation and recolonizing*

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*vegetation, and potential mitigation measures including replanting disturbed areas and their effectiveness. [LTR 008]*

**Response:** A time frame for the reestablishment of plants will be influenced by the species of plants and the season in which construction takes place. Regardless of the construction season, any disturbed areas would be mulched immediately with weed-free straw and reseeded as soon as practical along with the use of other measures to reduce erosion. Appropriate erosion measures would be developed through the Storm Water Pollution Prevention Plan. It is very difficult to predict erosion rate; however, mulch stabilization will minimize interim soil loss. Reseeding would be with native grasses and forbs (where possible and appropriate and with recommendations from the county) and there would be little difference between plant types, except a reduction in noxious weeds. Mitigation goals including performance standards will be addressed in the Mitigation Action Plan.

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**Comment:** *Page 3-17 states that no unavoidable or adverse impacts to geology or soils are expected to remain following completion of the project if the mitigation measures and best management practices listed earlier are implemented. This conclusion appears unsupported since the EIS has not indicated if or where, and in some instances, what mitigation measures and best management practices would be implemented and the expected effectiveness of such actions. [LTR 008]*

**Response:** The mitigation measures and best management practices listed in the draft EIS include accepted methods to minimize and negate impacts. The mitigation measures and best management practices to be implemented will be determined based on the site-specific effectiveness of a given method. Site-specific mitigation measures related to the construction of the project will be addressed in the Mitigation Action Plan.

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### **Streams, Rivers, and Fish**

**Comment:** *Are you getting Corps permits for creek near Mercer Ranch? [PS]*

**Comment:** *Corps considered permits for Glade Creek. (water of the state) [PS]*

**Response:** No fill impacts to waters of the United States would occur at Glade Creek or Dead Canyon. Therefore, no Section 404 or 401 permits would be required by the U.S. Army Corps of Engineers or the Washington State Department of Ecology for activities at this location.

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**Comment:** *[regarding fish-bearing streams temperatures]... the EIS should state what temperatures were measured. In addition, the EIS should also identify measures that Bonneville is using or could use to mitigate the impacts of high temperatures in these streams. [LTR 008]*

**Response:** The temperature of the water was measured in streams that had flowing water along the project corridor. The elevated temperature of these streams is a natural condition of the climate, exposure, and geologic conditions. The temperature is not affected by the current Bonneville transmission line alignment and would not be affected by the installation of the proposed new corridor line; the lines (existing and proposed) do not require riparian shade vegetation to be removed.

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**Comment:** *Page S-12 states that several common construction materials and petroleum products could be toxic to fish and other aquatic organisms if spilled into or near streams. A Spill Prevention and Contingency Plan should be included in the EIS and should state the spill risk, identify sources of toxic materials and environmental resources at risk, and mitigation measures. [LTR 008]*

**Comment:** *The EIS should contain the Spill Prevention and Contingency Plan and the environmental consequences section should predict the number and extent of hazardous material spills and impacts of these spills with implementation of the Plan. [LTR 008]*

**Response:** The Spill Prevention and Contingency Plan will be developed in association with the Mitigation Action Plan. The construction of the line would not require the use of large quantities of hazardous materials (use of fuels and oils in the operation of heavy machinery). Any spills or leaks would be minor, accidental and not predictable. The Spill Prevention and Contingency Plan will include provisions for the storage of hazardous materials, the refueling of construction equipment, a spill containment and recovery plan, and notification protocols.

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**Comment:** *The EIS should describe critical habitat for all listed species, the ESA process including Section 7 consultation, the consultation timeline, and a summary of biological assessments, especially conclusions about the likelihood of the proposed project adversely affecting listed species. [LTR 008]*

**Response:** Chapter 4 of the draft EIS provides information on the ESA process. Page 4-2 of the EIS has been updated to further address the Biological Assessment. Impacts to species and habitats are addressed in Chapter 3 in the sections Streams, Rivers, and Fish; Vegetation; and Wildlife.

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**Comment:** *Page 3-21 states that since steelhead trout are a federally listed species and their distribution overlaps with both chinook and coho, the analyses of current conditions and potential impacts to this species also serve to describe all potential impacts to EFH. The EIS does not support this statement. The document should show life history and habitat similarities as well as similarities between the purposes of ESA and EFH before making this statement.*

**Response:** Revisions and additions have been made to page 3-21 of the draft EIS.

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**Comment:** *Page 3-23 generally discusses how the project could impact fish habitat through the transport of sediment and the removal of riparian habitat. The EIS talks about impacts such as how increases in sediment in low-velocity stream reaches can cover suitable spawning gravel, cause channel braiding, increase width:depth ratios, increase incidence and severity of bank erosion, reduce pool volume and frequency, and increase subsurface flow. The EIS does not state, however, to what extent these are problems in the project area or to what extent these would be problems with project implementation. The EIS should state this and support these conclusions with measurements of stream health including the parameters listed above and the amount of large woody debris and riparian vegetation. This information is especially important in streams identified as water quality impaired and containing sensitive and listed fish species. [LTR 008]*

**Response:** As discussed on pages 3-23 and 3-24 of the draft EIS, the potential impacts of construction near streams is sedimentation. With the design of the project (spanning streams and not cutting riparian vegetation) and erosion control measures, the potential of sedimentation impacts to fish bearing, or potentially fish bearing waters would be minimized. To the east of Wood Gulch, streams typically have degraded riparian vegetation consisting of sagebrush and grasses, no large woody debris (LWD) recruitment potential and direct livestock access to the stream channel. Sedimentation is also more prevalent to the east of Wood Gulch due to degradation of the stream channel and stream banks associated with the livestock grazing.

To the west of Wood Gulch, riparian vegetation consisting of trees and larger shrubs are more common, degradation of stream channels and stream banks from livestock access is not as prevalent, LWD recruitment is greater, and sedimentation is not as prevalent.

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**Comment:** *Page 3-24 states that if areas cleared for tower footings were reseeded or naturally revegetated after construction, the potential for erosion and sedimentation would be less than if left as bare soil. The EIS should identify the location and the type and extent of reseeding and revegetating, and predict the reduced erosion and sedimentation for those sites. [LTR 008]*

**Response:** Comment noted. Reseeding and revegetation of bare-soil disturbed areas will occur where appropriate to mitigate for potential soil erosion. In addition to reseeding and revegetation efforts, erosion control methods such as silt fences and straw mulch will be used during construction to minimize the transport of sediments to adjacent surface waters via runoff. Implementation of the Stormwater Pollution Prevention Plan (to be developed during the drafting of the Mitigation Action Plan) will greatly reduce soil erosion and the potential impacts from the transportation of fines.

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**Comment:** *Pages 3-24 and 3-25 describe numerous potential measures to mitigate construction impacts. For example, blasting should be avoided within 200 feet of fish-bearing streams or the road gradient should be 0%. The EIS should state proposed*

*mitigation measures, describe where they would be implemented, and predict their effectiveness. The ROD should contain final commitments to implement such mitigation measures. [LTR 008]*

**Response:** Revisions have been made to the EIS to make sure the mitigation measures mentioned in the text are also on Bonneville's list of mitigation measures. Because design of the project (exact tower sites and roads) is preliminarily, the EIS does not state the mitigation based on exact sites, but as measures to be implemented in the given situation. For example, the measure that road gradients should be 0% when crossing dry washes, because Bonneville does not yet know all the exact dry washes that would be crossed, will be applied across the board; whenever a dry wash would be crossed by a road, the gradient would be 0%. Many mitigation measures are designed to avoid impacts (rather than lessen them), and therefore predicting their effectiveness is not relevant. Many of the mitigation measures designed to lessen potential impacts are based on Best Management Practices and would be monitored in the field to ensure that they are effective (i.e., erosion control measures). The Record of Decision will contain final commitments to implement mitigation measures.

Revisions and additions have been made to the bulleted list of mitigation measures on page 3-28.

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**Comment:** *The EIS should state the overall condition of roads in the project area, problem areas in the road system, impacts from the problem areas, and the length of time to fix road problems. [LTR 008]*

**Response:** The existing access road system supporting the corridor of transmission lines would be used to construct the proposed McNary-John Day transmission line. The existing road system is generally in good condition and is not causing impacts. Specific road reconstruction and new access road construction would be part of the overall construction schedule.

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**Comment:** *Page 3-35 describes potential impacts arising from the operation and maintenance of the proposed line due to the use of access roads for tower maintenance and vegetation clearing within the transmission line corridor. The EIS should describe what additional noxious weed control would be required due to areas being disturbed and the impact to water quality, vegetation, and wetland functions from pesticides entering wetland systems. [LTR 008]*

**Response:** Chapter 3, pages 3-37 thru 3-52 of the draft EIS describes the existing noxious weeds along the project corridor, the potential impacts of further weed invasion and mitigation measures to help prevent the spread of weeds. Noxious weed control activities are part of Bonneville's Transmission System Vegetation Management Program, an approved set of management actions designed for controlling vegetation as part of Bonneville's maintenance activities. The program focuses on an integrated

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vegetation management strategy that uses a number of methods for controlling vegetation, including noxious weeds. The reseeding effort after this project would be part of that strategy to help prevent the intrusion of noxious weeds. Other control methods that Bonneville uses include manual (pulling individual species in areas of low density), mechanical (mowing weeds prior to flowering), biological controls (the release of certified insects or fungus that stresses target species), and the use of herbicides. The potential impacts of the use of these methods are analyzed in the Transmission System Vegetation Management Program Final EIS (May 2000) for use across Bonneville's system. Tiered environmental analyses for site-specific vegetation control activities are conducted to determine appropriate methods and mitigation measures to be applied to particular site conditions. Because Bonneville has already analyzed the potential impacts of the vegetation control methods we would use, determined appropriate mitigation measures, and has a process for site-specific analysis, it would be repetitive to describe that information in this EIS. The entire plan—including all potential noxious weed control methods, their impacts, and appropriate mitigation—is incorporated by reference into this final EIS.

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**Comment:** *We noted a discrepancy between the width of disturbance expected on the access roads for the transmission line. On page 2-7 under the "Access" heading, it says that a "20-foot-wide total area" would be disturbed; on page 3-25, under "Access Roads," it says the approximate impact area would be 25 feet wide. [LTR 007]*

**Response:** Revisions have been made to both pages 2-7 and 3-25 of the draft EIS.

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**Comment:** *Page S-13 contains the following mitigation measure: place towers outside of stream riparian areas and utilize natural landscape features to space the conductor over existing shrub and tree riparian zones and avoid cutting. The EIS should identify areas where proposed towers would need to be set in new locations to avoid stream riparian areas and to utilize natural landscape features to space the conductor over shrub and tree riparian zones and avoid cutting. [LTR 008]*

**Response:** The location of towers would be determined as the line is designed. This mitigation measure would be taken into account so that the towers would be located such that riparian vegetation would not be affected. The topography between the McNary and John Day Dams is such that new towers for the proposed new transmission line corridor could be located on ridge tops and thus avoid the issue of having to remove any riparian vegetation.

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**Comment:** *Page S-13 contains the following mitigation measure: avoid tower or access road construction on potentially unstable slopes where feasible. The EIS should identify these areas. [LTR 008]*

**Response:** Those areas that may contain potentially unstable slopes are located almost exclusively to the west of Wood Gulch on the Washington side of the corridor. The slopes are steeper and signs of past episodes of erosion are evident in various areas along this portion of the proposed corridor.

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**Comment:** *The EIS should identify dry wash crossings needing water and sediment control devices and the appropriate water and sediment control device for each site. [LTR 008]*

**Response:** Sediment control devices would be installed at all dry washes that require road work. Devices would include silt curtains and weed-free hay bales. Dry washes occur exclusively to the west of Wood Gulch Creek. The majority of these dry washes flow off of steep hill slopes only to dissipate upon reaching a flat area and go subsurface or pond up prior to entering a fish bearing, or potential fish bearing water. It is recommended that access roads that cross dry washes do not have culverts installed, but instead are simple wet crossings. This would avoid maintenance issues associated with culverts.

Mitigation for specific dry wash crossings will be more fully developed and addressed in the Mitigation Action Plan.

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**Comment:** *We also support the use of existing water crossing structures whenever possible to avoid the need for new structures. [LTR 011]*

**Comment:** *The EIS should identify places where culverts would be installed, state the appropriate culvert size, and list mitigation measures to be used during installation. [LTR 008]*

**Response:** We are utilizing the existing access road system as much as possible and no new water crossing structures would be needed in fish bearing streams. However, two existing culverts would need to be replaced and four new culverts installed. All culvert work would be done in non-fish bearing streams or drainages. Approximately twenty-four ford-type crossings would need to be constructed in wetland and drywash road crossings. All new culverts will be designed using Washington Department of Fish and Wildlife culvert design and installation guidelines.

Sediment control devices would be installed at all dry washes that require road work. Devices would include silt curtains and weed-free hay bales. Dry washes occur exclusively to the west of Wood Gulch Creek. The majority of these dry washes flow off of steep hill slopes only to dissipate upon reaching a flat area and go subsurface or pond up prior to entering a fish bearing, or potential fish bearing water. It is recommended that access roads that cross dry washes do not have culverts installed, but instead are simple wet crossings. This would avoid maintenance issues associated with culverts.

## 4 Responses to Comments

Mitigation for specific to each culvert or dry-wash crossings will be more fully developed and addressed in the Mitigation Action Plan.

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**Comment:** *The EIS should contain maps identifying the proposed locations of roads and staging demonstrating that they lay outside waters of the United States. [LTR 008]*

**Response:** No staging areas would be located within waters of the United States. There are approximately 24 locations where new access roads would cross waters of the United States where avoidance is not possible. The acreages of these crossings will be determined during Section 404 and 401 permitting as required for this project and in the Mitigation Action Plan.

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**Comment:** *The draft Environmental Impact Statement indicates that there will be several stream crossings associated with both the new and the improved access roads proposed throughout the project. Hydraulic Project Approvals will be required for installation and maintenance of all proposed water crossing structures. There is insufficient information in the DEIS to determine if additional mitigation will be necessary for these projects, especially with regard to the 11 fish bearing streams which will be crossed by access roads. [LTR 011]*

**Response:** The 11 fish bearing streams would not have new stream crossing features installed. Crossing of these streams would continue on existing access roads, none of which are owned or maintained by Bonneville, such as SR 14. New access roads would only cross at non-fish bearing water. Mitigation measures would be adequate to ensure that fish and fish habitat would be minimally and temporarily affected by construction activities of the proposed project.

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**Comment:** *We concur with the recommended mitigation measures within the DEIS that all towers are placed at least 200 feet from the ordinary high waterline of fish bearing streams. [LTR 011]*

**Response:** Thank you for your comment. Preliminary designs indicate that the project would be able to abide by this measure.

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**Comment:** *The recommended application of BMPs within the DEIS for road construction and maintenance should be implemented to avoid sedimentation of fish bearing waters. [LTR 011]*

**Response:** Thank you for your concurrence on the BMPs; Bonneville plans to implement them.

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**Comment:** *It appears from the general description of the project, that a Hydraulic Project Approval (HPA); Chapter 77.55 RCW, WAC 220-110) to be issued by WDFW, will be required for the project. [LTR 011]*

**Comment:** *There is insufficient project detail to determine specific conditions or mitigation to be placed on the project at this stage of the project development. We encourage you to seek involvement from WDFW on resource needs and typical project requirements to insure proper protection of fish life as you proceed with project design and development. Early involvement with WDFW will facilitate later processing of the HPA. Once final design plans are available, please submit a completed Joint Aquatic Resource Permits Application (JARPA) for a Hydraulic Project Approval (HPA), including complete plans and specifications, to WDFW for review. [LTR 011]*

**Comment:** *The plans and specifications should be developed relative to the ordinary high water line. The drawings should accurately depict existing conditions including all prominent natural features and manmade improvements in the water and on the bank in the immediate vicinity of the project area. They should include plan and cross-sectional views of the proposed project, a vicinity map of the project area, and accurate directions to the project site. In addition, to aid us in locating the project site, a photograph should be supplied. [LTR 011]*

**Response:** There are several small non-fish-bearing water bodies that would be crossed by the access roads in which a Joint Aquatic Resources Permit Application (JARPA) for a Hydraulic Project Approval (HPA) would be submitted. Thank you for detailing the information that would be needed; Bonneville will include it in the permit.

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### **Wetlands and Groundwater**

**Comment:** *The flats have lots of water during wet winters, lots of rocks and rattlesnakes. (see sheets 68-72 ~ soggy rather than flooded) [PS]*

**Response:** Thank you for your comment. Several wetland features were inventoried within the area between corridor miles 60 and 72.

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**Comment:** *S-9 describes cropland, grazing, and upland areas impacted by the project. The EIS should also state the acres of wetlands impacted by action alternatives. [LTR 008]*

**Response:** Potential wetland impacts are described in the Wetlands and Groundwater section of Chapter 3.

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**Comment:** *Pages 3-30 and 3-31 contains site-specific information about wetlands. The EIS should contain this level of information about other resources. A map of wetland*

## 4 Responses to Comments

*resources in the project area would help the reader understand the location and extent of this resource. [LTR 008]*

**Response:** Site specific information is provided for each of the natural resources evaluated within the draft EIS. The locations of all wetlands identified during field surveys of the project right-of-way are presented in Figure 3-2.

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**Comment:** *Page 3-32 states that the construction of new access roads in association with the Hanford-John Day Alternatives B and C would potentially fill 0.1 acre of emergent wetlands. The EIS should describe the Clean Water Act Section 404 permitting process for this fill activity. [LTR 008]*

**Response:** Please refer to Chapter 4, Consultation, Review, and Permit Requirements of the draft EIS for a complete description of the Clean Water Act Section 404 permitting process.

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**Comment:** *We recommend that the EIS contain actions that compensate for the 0.1 acre filling, the removal of wetland buffer vegetation, and construction activities. [LTR 008]*

**Response:** The appropriate level of mitigation for impacts to wetlands and their regulated buffers will be determined through Section 404 and 401 and local permit conditions for wetlands protection and impacts compensation.

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**Comment:** *Page 3-34 states that erosion in areas of soil disturbance and vegetation removal could result in increased groundwater turbidity. The EIS should inform the reader of what areas are at risk, the level of that risk, possible levels of turbidity, and whether these levels are significant. [LTR 008]*

**Response:** Please refer to the paragraph immediately following Table 3-9 for a complete description of the potential impacts to groundwater from increased turbidity following soil disturbance and vegetation removal.

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**Comment:** *Page 3-37 could include two additional mitigation measures at the site level (with estimates of effectiveness). These are to avoid using pesticides around wetlands and to pull weeds (i.e., mechanical control) prior to them developing seed heads. [LTR 008]*

**Response:** Control of noxious weeds and the use of appropriate mitigation measures for herbicide use within the transmission line corridor will be guided by Bonneville's Transmission System Vegetation Management Program.

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**Comment:** *Although the DEIS identifies wetlands within the project route, there appears to be insufficient information to determine to what extent they will be affected by the project. The proposed access roads and other associated structures should be located to avoid impacts to these wetlands. In instances where structures must be placed within or near wetlands, delineations should be completed to determine mitigation requirements. [LTR 011]*

**Response:** Towers and roads would be located to avoid impacts to wetlands where possible. Unavoidable wetland impacts would total less than 1.0 acre of the 45 total acres of wetlands surveyed within the project area. Wetland delineations will be conducted prior to construction for Section 404 and 401 permitting purposes the using the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual and the 1997 Washington State Wetlands Identification and Delineation Manual.

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### **Vegetation**

**Comment:** *I'm assuming the weed board will follow up on noxious weeds? [RS]*

**Response:** Bonneville is working with the weeds boards for noxious weed control.

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**Comment:** *I also understand that you'll evaluate weeds after construction. [RS]*

**Response:** Bonneville would conduct a weed survey a couple of growing seasons after construction to identify whether any mitigation measures need to be taken to control the weeds as a result of Bonneville's construction.

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**Comment:** *The Washington Natural Heritage Program has reviewed the draft EIS for the McNary-John Day Transmission Line Project, and we have found serious deficiencies in the Special Status plants portions of the document (pgs. 3-40 and 3-41) [LTR 001]*

**Comment:** *The July survey time is inappropriate for ALL of the potential species in the project area. Northern wormwood is identifiable in late April and early May. Ute ladies' tresses is identifiable in late July through September, but one July survey is not enough to rule out the possibility of the presence of the species (see section 7 guidelines for Ute ladies' tresses). All of the state sensitive species are identifiable from late April through early June at the latest. In other words, none of these special status plants would be found during a July survey, so asserting that "neither species was found during field surveys" is not biologically significant. [LTR 001]*

**Comment:** *Although [Ute ladies tresses, northern wormwood, pauper's milk-vetch, Snake River cryptantha, and Piper's daisy] are potentially present in the project area, the field survey was conducted at an inappropriate time of the year. The July 2001 survey period reported in the DEIS is not a proper time to search for the plants listed above. Ute ladies'-tresses flowers in August through September, and technical*

## 4 Responses to Comments

*characters of the flower are needed for identification. Northern wormwood flowers in April, and the involucre (structures surrounding the flowers) are important in distinguishing it from related members of the same genus. Pauper's milk-vetch flowers from April to mid May, and the WNHP Rare Plant Guide states that "by late June all fruits are mature and plants fall into dormancy." Snake River cryptantha blooms in May and June, and flowers would not be present in July, although the plant may be recognizable in July by someone who is familiar with its appearance. Piper's daisy flowers in May and possibly into June, but...aboveground structures could have dried up by July... [LTR 07]*

**Comment:** *Lomatium laevigatum* (smooth desert parsley) also occurs within 1/4 mile of the transmission line corridor, and was not included in the surveys. [LTR 001]

**Comment:** *This portion of the Columbia River is one of the most diverse areas in the state, with high potential for rare plant populations. Our recommendation would be to reject the findings for special-status plants altogether, and to require another survey, with, at a minimum, the following methodology:*

- a) The development of a thorough list of potential species*
- b). Surveys undertaken by qualified Botanists with experience in eastern Washington rare plant surveys*
- c). Section 7 guidelines for Ute ladies' tresses followed properly*
- d). Surveys undertaken at the proper time of the season for each potential rare plant species, which may require more than one survey in selected sections of the project area*
- e). Surveys completed for all portions of the project area that still support native vegetation*
- f). A full species list compiled for the project area, and a full description of survey methodology included in the final EIS. [LTR 001]*

**Comment:** *Did a qualified Botanist conduct the survey? [LTR 001]*

**Comment:** *Was a full species list compiled? [LTR 001]*

**Comment:** *There is significant discussions of methods in this section. Was the entire project area surveyed, or just the areas with potential for the species above. On what specific days in July did surveys take place? Survey dates are significant for rare plant surveys. [LTR 001]*

**Comment:** *To provide better understanding, the EIS could provide a table listing potential special status plants species, their habitats, and appropriate timing for field observation. G262 [LTR 007]*

**Response:** A qualified botanist with experience in eastern Washington plant communities, with degrees in ecology and botany, and over 14 years experience in vegetation inventory conducted general vegetation surveys in July 2001, of the entire

project area. Additional focus was placed on areas with higher potential for sensitive plant species, as described in the existing literature.

Additional field surveys for Special Status plants within and adjacent to the McNary-John Day Transmission Line Project, are being conducted with timing more appropriate to the peak flowering periods for these species. The list of target species for these additional surveys was based on existing literature, including the Washington Natural Heritage Program database and additional recognized references. The additional surveys cover all portions of the project area that are dominated by native vegetation, as well as moderately-disturbed shrub-steppe areas.

Additional field surveys for northern wormwood were conducted on April 18 and 19, 2002. Additional field surveys for state sensitive species, including *Lomatium laevigatum* (smooth desert parsley), were conducted May 28-30, 2002. Additional field surveys for Ute ladies' tresses will be conducted in late August 2002, following Section 7 guidelines. The timing of the additional surveys has been coordinated with a representative of the Washington Department of Natural Resources, and is appropriate for the target species. Pages 3-40 and 3-41 have been updated to include information from the additional surveys.

A full species list for the entire project was not compiled. A complete list of sensitive plant species, indicating flowering periods and preferred habitat, was prepared as part of the background research prior to field surveys. This list was based on information obtained from U.S. Fish & Wildlife Service and the Washington Natural Heritage Program database for Klickitat and Benton Counties. It was not included in the EIS.

A technical memorandum on Special Status plant species will be developed for Washington Department of Natural Resources that will include a full species list and survey methodology.

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**Comment:** *We do not identify "potential habitat" for state sensitive species. We do identify known populations, and it appears that there are known populations in our database of both Pauper's milkvetch and Snake River cryptantha from the project corridor. The language is misleading and inaccurate. [LTR 001]*

**Response:** The use of the term "potential habitat" was intended as a reference to WNHP-identified known locations of the two species mentioned. It was not intended as a reference to an agency-approved cover type or standardized definition. The commenter is correct in noting that WNHP does not designate potential habitat. The term has been removed, and the language in the draft EIS has been clarified.

The term "potential habitat" on pages 3-40 and 3-41 of the draft EIS has been removed and the paragraph clarified.

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## 4 Responses to Comments

**Comment:** *The EIS states that vegetation would be maintained along the line for safe operation and to allow access to the line. The EIS should summarize direction provided by the earlier Bonneville Vegetation Management EIS and apply that direction to the proposed transmission line. The EIS should summarize direction provided by the earlier Bonneville Vegetation Management EIS and apply that direction to the proposed transmission line. Specifically, the EIS should include a weed control management plan that utilizes Integrated Pest Management (IPM). EPA supports using manual, cultural, and biological alternatives over pesticides when possible because of the potential problems from the fate and transport of pesticides in the environment. [LTR 008]*

**Comment:** *Page S-9 does not describe how Bonneville would control weeds around the base of the towers. The EIS should contain this information. [LTR 008]*

**Response:** Pages 2-10 and 2-11 of the draft EIS describe Bonneville's Vegetation Management Program EIS and how it would apply to the proposed transmission line. As described in the Vegetation Management Program EIS, Bonneville works with weed boards and landowners in coordination with area-wide plans for noxious weed control. Because it works with the other entities on noxious weed control, and it plans vegetation management activities tiered to its Vegetation Management Program EIS, Bonneville does not think it is appropriate to include a weed management plan in this EIS.

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**Comment:** *I am concerned with noxious weeds on my easement, especially star thistle. Does Bonneville have a policy that states "Will Bonneville keep the easement free from noxious weeds"? [PH 009]*

**Response:** Bonneville works with the county weed boards, which have area-wide programs for noxious weed control including roadside weeds and overall weed issues in an area.

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**Comment:** *The EIS should identify existing projects in the area that aim to restore or protect native plant communities and cryptogamic crusts, including those receiving Bonneville funding. If none exist, Bonneville should consider incorporating the restoration of native plant communities and cryptogamic crusts into the project design. [LTR 008]*

**Response:** Recommended mitigation actions discussed on page 3-52 of the EIS include reseeding areas temporarily disturbed in higher quality shrub-steppe with native grasses and forbs (if recommended by the local county), and salvaging topsoil and bunchgrass plant material. Reseeding would occur during the appropriate planting season. All disturbed areas would be reseeded with seeds of native plant species recommended by the local county. Details of revegetation of native plant communities and cryptogamic crusts will be incorporated into the Mitigation Action Plan for the project.

Revisions have been made to page 3-52, bullet item 9.

**Comment:** *Appendix C (Common and Scientific names of Plants in Study Corridor) is confusing. The DEIS states that none of the plant species listed above were found in the surveys, yet all five of these plants are included in the list in the appendix. The confusion might be clarified by changing the title of the appendix to reflect what the list of plants actually represents (ex. List of Plants That Could potentially Occur in the Study Corridor [or]...List of Plants Identified as Occurring in the Study Corridor...delete[ing] the names of five plants now listed in the appendix... [LTR 007]*

**Response:** Appendix C (Common and Scientific names of Plants in Study Corridor) is intended simply as a guide to all scientific names found in the draft EIS. It is not intended to represent a list of all species located in the project area. Revisions have been made to the appendix title for clarification.

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### **Wildlife**

**Comment:** *Page S-20 describes environmental consequences of the project on wildlife species. The section addresses in a cursory fashion the effect of the existing corridor and, to a lesser extent, the proposed project on habitat fragmentation. The corridor, access roads, and transmission lines serve as an obstacle to animal migration through the area. The corridor and road likely deter terrestrial animals from crossing due to lack of cover, reduced forage and browsing opportunities for species, changes in wildlife migrations patterns, and occasional human activity in these areas. [LTR 008]*

**Response:** Wildlife habitat and movement of wildlife along the transmission line route have been affected by a variety of land uses and manmade features, including but not limited to SR 14, intensive agriculture, existing unpaved roads, and transmission towers. These existing uses have resulted in fragmentation of natural wildlife habitats along the entire length of the project corridor. As mentioned on page 3-52 in the vegetation section of the draft EIS, design and construction of the proposed project will focus on minimizing vegetative clearing, particularly in areas of the higher quality shrub-steppe. Additionally, reseeded construction areas will provide some measure of habitat for wildlife.

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**Comment:** *The EIS demonstrates that transmission lines act as a barrier to bird movement. We are concerned that transmission lines could separate the cliff nesting areas for bald eagles from the riverine areas where bald eagles hunt. In addition, the corridor creates edge effects which likely favor several bird and wildlife species. [LTR 008]*

**Response:** As mentioned on page 3-54 of the draft EIS, no bald eagle nesting occurs in the project area. Pages 3-68 through 3-71 discuss the potential effect of the transmission line on bird movement; mitigation measures are defined on pages 3-73.

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## 4 Responses to Comments

**Comment:** *Page 3-57 states that most nest sites for raptors occur on cliffs, although artificial structures such as power line towers are also used for nesting and perching. The EIS should state whether proposed or existing power lines towers could be and should be modified to enhance raptors' ability to nest on them. [LTR 008]*

**Response:** Although some raptors have been known to nest on transmission lines, the use of towers for that purpose is not encouraged by Bonneville or utility companies in general. There are no plans to modify the structures to encourage nesting.

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**Comment:** *Page 3-58 states that American white pelicans, a state-listed bird, are known to forage on islands located about 3 miles south of the project corridor. The EIS should describe to the south of where, along the 79-mile long project corridor, American white pelicans forage or include a map illustrating their location. [LTR 008]*

**Response:** Locations of white pelican use are shown on Figure 3-4 (following page 3-56) of the draft EIS.

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**Comment:** *Page 3-59 states that during the spring 2001 surveys, four areas with burrows were identified in shrub-steppe habitat within the project corridor. If possible, the EIS should identify the animals using the burrows instead of listing all possible ones. [LTR 008]*

**Response:** Determination of species-specific use of the burrows was not feasible during surveys. Burrow areas were checked for presence of animals as well as for wildlife signs such as footprints and scat. Species-specific use (e.g., burrowing owls) of burrows were rated based on the field observations. Use of burrows by wildlife varies annually and sometimes seasonally. Information on burrow locations will be used for preparation of the Mitigation Action Plan. Major burrow areas will be flagged as sensitive areas and designated off-limits during construction.

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**Comment:** *Page 3-64 should state if tower locations would impact burrowing owl burrow areas and if so, where towers would be relocated to avoid these areas. [LTR 008]*

**Response:** As discussed on page 3-64 of the draft EIS, it is expected that burrowing owl habitat (including burrowing areas) could be affected by the proposed action. However, mitigation is included to avoid occupied burrows. Burrowing owl habitat and occupied burrows will be identified in the Mitigation Action Plan as a sensitive wildlife area to be avoided during construction. Please see page 3-73 of the draft EIS for mitigation measures.

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**Comment:** *Page 3-60 states that there have not been any reports of sensitive-status reptiles in the project vicinity; however, suitable habitat is present for the following*



*species. The EIS should report the results of surveys for reptiles in the project area. [LTR 008]*

**Response:** No formal surveys of reptiles were conducted for the project. Any reptiles observed during field surveys were reported by species in field notes and in the species list.

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**Comment:** *Pages 3-63 and 3-64 state that several 40- to 50-foot cottonwoods representing potential eagle perching habitat and located near the Corps' Wildlife Natural Area at the McNary Substation may need to be removed under the McNary Substation Alternative B to facilitate transmission line clearance. The EIS should state whether there trees can be moved to another location in the Corps' Wildlife Natural Area rather than being removed. [LTR 008]*

**Response:** Moving the trees to other locations is not considered feasible for such large trees.

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**Comment:** *Page 3-65 discusses impacts to passerines. This section should also discuss the impact of edge effect and habitat fragmentation from the existing and expanded transmission line corridor, especially how it can affect species composition. [LTR 008]*

**Response:** The creation of edge effect by the proposed alignment will result from construction of towers and spur roads. See revised Table 3-12 in Chapter 3 of this final EIS for revised acreages. Approximately 90% of the alignment is currently in a highly modified habitat condition due to past and current land use activities. Of the remaining 10% (consisting of riparian, scabland/lithosols, and shrub-dominated shrub-steppe), only 7 acres would be permanently changed to towers or access roads. An additional 22 to 23 acres within these more native habitats would be temporarily impacted (Table 3-13). The edge effect resulting from these changes may result in localized changes in vegetation covers and suitable habitat for some passerines (e.g., Brewer's, sage, and vesper sparrows) (Vander Haegen et al. 2000). The more ubiquitous passerines would be unaffected.

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**Comment:** *Page 3-66 states that the project will require the construction of approximately 3 miles of new access road and 270 short spur roads, which would remove vegetation and wildlife habitat. We recommend that the EIS examine compensating for the loss of this land using land purchases or habitat enhancement projects. [LTR 008]*

**Response:** Table 3-12 of this final EIS (Chapter 3) identifies the impacts to vegetation types from road construction. Of the 63 acres to be permanently impacted from roads, 90% would occur in highly disturbed habitats (agricultural, grassland, grazed shrub-steppe), with the remaining 10% (5 acres) occurring in the less disturbed lithosols and shrub-dominated shrub-steppe.

## 4 Responses to Comments

As a part of the Mitigation Action Plan, Bonneville is formulating a mitigation approach to address loss of the shrub-steppe and lithosol habitats. We will consider both land purchases and habitat enhancement projects and will work with both the State and USF&WS to determine appropriate mitigation. The mitigation approach will consider such factors as acreage, type of impact, and condition of the habitat.

Also, please note that Bonneville would pay the landowners fair market value for any new access road easements that need to be acquired.

---

**Comment:** *Page 3-70 states that raptors are often attracted to transmission towers to use them as nesting sites. The EIS should also recognize the use of transmission lines and towers as places where raptors perch to view the area for prey. [LTR 008]*

**Response:** A revision has been made to page 3-70 to acknowledge this potential use.

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**Comment:** *Page 3-70 contains a very brief discussion of the avoidance of areas by wildlife. This section should additionally discuss wildlife avoiding the area because of a lack of cover and foraging and browsing plants. [LTR 008]*

**Response:** A revision has been made to page 3-70 to further clarify this potential impact.

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**Comment:** *Page 3-73 contains the following mitigation measure: prior to construction, conduct raptor nest surveys of cliffs located within 0.25 mile of the right-of-way. EPA supports and NEPA requires information on the affected environment, however, data collection is not a mitigation measure. This information should already be included in the EIS to establish baseline information and determine project impacts. [LTR 008]*

**Response:** This measure represents an additional survey prior to construction needed to confirm if raptors are actually present at the time construction would begin. This additional survey would determine if nests are actually occupied within the 0.25 mile of the alignment in order to know if other construction timing measures would need to be implemented so as not to disturb nests.

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**Comment:** *While the DEIS identifies the Environmental Consequences and provides means to avoid most of the potential environmental risks associated with the proposed project, it also itemizes impacts which cannot be avoided. We believe that the project will contribute to an increased level of habitat fragmentation and a reduction in available shrub-steppe vegetation for wildlife habitat. [LTR 011]*

**Comment:** *Unmitigated impacts include the area of habitat which will be lost through construction of roads, improved roads, pulling and reeling, staging areas, substations, wetlands, water crossing structures, riparian corridors, and well as other cumulative*

*impacts. While it is relatively easy to total the acreage of impacted habitats, cumulative impacts and disturbance associated with the projects are more difficult to assess. [LTR 011]*

**Response:** Fragmentation of wildlife habitat would occur in varying degrees. As indicated in Table 3-12 on page 3-43 of the draft EIS, loss of 83 acres of vegetation would occur from the proposed action. Of those 83 acres, 90% are in a highly modified condition (agricultural, grassland, grazed shrub-steppe) due to past and current land uses and activities. Of the remaining 10%, only 3 acres of shrub-dominated shrub-steppe would be permanently removed by the project. The impact would be minimized through reseeding temporarily disturbed higher quality shrub-steppe with native grasses and forbs (page 3-52) and minimizing the amount of vegetation clearing and road construction in shrub-steppe areas (page 3-74).

The combined impact of construction activities would result in an incremental reduction of wildlife habitat of varying quality within the project area. Cumulative impacts which would vary by wildlife species, and habitat type affected, are defined on pages 3-127 through 3-131 of the draft EIS. The acreage of impacts have been updated since the draft EIS. Please see revisions to tables 3-12 and 3-13.

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**Comment:** *Section S-2 of the DEIS indicates that the road disturbance associated with the preferred alternative will result in 15.8 miles of new road or more than 76 acres (15.8 miles x 5,280 ft/mile x 40 foot average road width) of habitat disturbance. It is not clear in the DEIS about the amount of additional vegetation or shrub-steppe impacts associated with improving and widening 40 miles of existing roads. [LTR 011]*

**Response:** Please refer to *Regrading of Existing Roads* in the Vegetation section on page 3-45 of the draft EIS. Reconstruction of existing access roads would affect approximately 78 acres of previously disturbed area not supporting vegetation communities.

Table 3-12 in Chapter 3 of this final EIS identifies the impacts of new access road construction on vegetation, resulting in the permanent loss of 34 acres of shrub-steppe habitat. The acreage of impacts have been updated since the draft EIS. Table 3-13 identifies the temporary impacts to vegetation.

---

**Comment:** *Section S-2 also indicates that the tower pads will result in the loss of 90.0 acres (360 towers x 0.25 acre disturbance), and an additional 1.3 acres will be lost to substation installation. These figures add up to more than 167 acres of habitat that would be lost through implementation of the preferred alternative, not including impacts associated with wetlands, equipment staging areas, and conductor tensioning sites. The shrub steppe component of the lost habitat appears to be 51 acres (68 acres of vegetation – 17 acres of agricultural land) that will be permanently disturbed. [LTR 011]*

## 4 Responses to Comments

**Response:** Tables 3-12 (page 3-43) and 3-13 (page 3-44) present the permanent and temporary impacts to vegetation. The acreage of impacts have been updated since the draft EIS, please see revisions to Tables 3-12 and 3-13 in Chapter 3 of this document. The area of permanent impact by towers has been changed from 0.25 acre to 0.05 acre. Eighty-three acres would be permanently converted to project structures, while the temporary impacts would range from 211 to 226 acres. Approximately 42 acres of shrub-steppe would be permanently converted to project structures (see Table 3-12).

---

**Comment:** *It appears that the total direct loss of shrub-steppe habitat will be between 50 and 100 acres. Direct loss may be reduced if restoration and revegetation work is implemented in the project corridor.*

**Response:** See updated Tables 3-12 and 3-13 of this final EIS. Eighty-three acres would be permanently converted to project structures, while the temporary impacts would range from 211 to 226 acres. Approximately 42 acres of shrub-steppe would be permanent converted to project structures (see Table 3-12).

Revegetation in shrub-steppe is identified as a mitigation measure on page 3-52. The exact location of revegetation will be determined during preparation of the Mitigation Action Plan for the alignment.

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**Comment:** *Additional impacts to fish and wildlife which are likely to result from implementation of the preferred alternative include, the lineal distribution of noxious weeds, bird strikes, some loss of ecological connectivity due to habitat fragmentation. [LTR 011]*

**Response:** Comment noted. These impacts were identified in the Vegetation and Wildlife sections of the draft EIS.

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**Comment:** *WDFW's mitigation policy is to seek greater than 1:1 mitigation ratios for impacts or direct loss of fish and wildlife habitat. Three to one (3:1) ratios are typically used. A 3:1 to 5:1 mitigation ratio is valid for shrub-steppe due to: 1) difficulty in restoring habitats in arid environments; 2) length of time to restore a climax community (20-30+ years for sagebrush); 3) fragmentation impacts beyond those of direct habitat lost by roads, towers etc. (e.g., transmission line built through a remnant block of shrub-steppe reduces the ecological connectivity and functionality of the whole block even though most habitat is not directly disturbed). [LTR 011]*

**Comment:** *With consideration of expected cumulative impacts it appears that the preferred alternative will conservatively require acquisition or protection of a minimum of 150 to 300 acres of shrub-steppe habitat to mitigate for impacts which cannot be avoided. [LTR 011]*

**Response:** As a part of the Mitigation Action Plan, Bonneville is determining an appropriate mitigation approach to address loss of the shrub-steppe and lithosol habitats. The mitigation approach will consider such factors as acreage, type of impact, and condition of the habitat. The EIS has been corrected to clarify that compensatory mitigation is under consideration for these impacts. Bonneville will be continuing its dialogue with WDFW on these issues.

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### **Cultural Resources**

**Comment:** *Are you doing studies for traditional cultural properties review? (tribal) [PS]*

**Response:** The affected Tribes have identified TCPs (Traditional Cultural Properties) along the project. Pages 3-77 and 3-78 list the TCPs that the Umatilla Tribes have identified. The Warm Springs indicated the entire project area is to be considered a “cultural site” as per definition of Tribal Ordinance 68, Chapter 490. The Warm Springs designated no TCPs. Information from the Yakama Nation was not available.

Text has been added to page 3-78 of the draft EIS.

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**Comment:** *Archaeology site – you’ve done surveys?*

**Response:** Yes, Reconnaissance level surveys were conducted in September 2001, November–December 2001, and May 2002.

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**Comment:** *Know of lots of arrow heads near John Day. [PS]*

**Response:** This area along the Columbia River was heavily used by various Tribes. Arrowheads are common artifacts along the Columbia River and reflect use of the region by prehistoric, ethnographic, and modern native American peoples. Arrowheads or projectile points alone do not constitute an archaeological site.

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**Comment:** *There are a lot of caves around corridor miles 52 and 53. [RS]*

**Comment:** *There are a lot of caves along the flats. (see sheets 68-72) [RS]*

**Response:** Yes, cultural resource specialists have noted the caves during the surveys of the corridor.

---

**Comment:** *[Correction] - text of DEIS - Chapman Creek named after Joe Chapman, who established a wood yard for steamers at the mouth of creek in 1859. (pg. 3-80 of DEIS) [RS]*

**Response:** Thank you, the revision has been made.

## 4 Responses to Comments

**Comment:** *Pioneer cemetery 1870's/80's, 4 headstones, used to be more wooden crosses but burned in fires. [RS]*

**Response:** Thank you for the information. The cemetery was noted during cultural resource surveys.

---

**Comment:** *It is impossible for us to comment on the effects this proposed project will have on cultural resources prior to the publication of the cultural resource survey report prepared for this project. [LTR 004]*

**Response:** The Cultural Resources Technical Report, which will have details regarding impacts and mitigation measures for cultural resources, has been sent to the affected Tribes, Federal land managing agencies along the line, and the State Historic Preservation Officers for review and comment before being submitted to the SHPO's for concurrence.

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**Comment:** *We wish to be clear that Bonneville will need to provide us with an adequate opportunity to comment on that report. [LTR 004]*

**Response:** Bonneville will provide you an opportunity to review the draft report and would greatly appreciate your comments.

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**Comment:** *Our initial reaction to the cultural resources sections is that they exclusively focus on Washington. The majority of the project is in the state of Washington, but both ends are in Oregon. The scales of the maps in the draft EIS are such that you can not tell whether the proposed transmission line will go through known sites in Oregon. [LTR 004]*

**Response:** Because of the sensitivity of sites, Bonneville does not put maps showing cultural sites in the EIS. As a Tribe, you will have an opportunity to review the Technical Report, which will show detailed maps of all sites.

---

**Comment:** *The fact that the Recent Recorded History section does not talk about the cities of Umatilla, McNary, or Rufus, Oregon, the railroad on the Oregon side, or Interstate 84 when the proposed line seems to relate to each is disappointing. [LTR 004]*

**Response:** All of the areas will be addressed in the Cultural Resources Technical Report.

---

**Comment:** *We were also surprised to see the main reference to Lewis and Clark was to their stay in Wishram, considerably downstream from the project area, rather than to their visit to Plymouth Island, Blalock Island, or the like. [LTR 004]*

**Response:** Lewis and Clark references have been updated in the EIS and also will be addressed in the Cultural Resources Technical Report.

Text has been added to page 3-78 of the draft EIS.

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**Comment:** *It is not clear for the Tribal Oral History section whether Jones and Stokes has yet to receive reports from the Warm Springs and the Yakama Nation or if they have decided to only summarize the CTUIR's report. [LTR 004]*

**Response:** The oral history summaries from the Confederated Tribes of Warm Springs are included in the final EIS. The Yakama Nation oral history was not available for summary in the Final EIS.

An addition has been made to page 3-78 of the draft EIS.

**Comment:** *On page 3-77 there is what appears to be a quote from a report by Catherine Dickson that refers to the CTUIR's traditional cultural properties. This quote is actually from a report by Teara Farrow. [ LTR 004 ]*

**Response:** Thank you, the text has been revised to credit the quote to Teara Farrow instead of Catherine Dickson.

A revision has been made to page 3-77, paragraph 3 of the draft EIS.

---

**Comment:** *It is unclear when a cultural resource monitor will be present. Will it be during the construction of all new roads or towers, certain new roads, and/or certain towers? Who will make that decision? We would like to remind Bonneville that on previous projects where you have agreed to have a cultural resource monitor present, there have been considerable communication difficulties and often the project has taken place without the monitor. We hope that Bonneville will ensure that such a problem will not be encountered on this project. [LTR 004]*

**Response:** Bonneville's and Jones & Stokes' archeologists, in coordination with the affected Tribes, would develop a monitoring plan, including a determination of cultural-resource high-probability areas for monitoring. Bonneville would also develop a cultural resource management plan for protection of resources during operation and maintenance of the line. Bonneville is committed to having monitors present where appropriate.

---

**Comment:** *It is apparent that the new roads will be constructed as part of this project and presumed that existing roads may be improved. Will Bonneville take any measures to ensure that these roads are not accessible to the public? Otherwise increased numbers of people may be able to reach some of these formerly remote sites. [LTR 004]*

## 4 Responses to Comments

**Response:** Because Bonneville does not own the land, but has an easement on it, accessibility of the access roads to the public would be determined by the land agreement with the individual landowners.

---

**Comment:** *On page 3-84, the draft EIS states, “Of the 14 [newly recorded] cultural resource sites found, 12 require avoidance and two sites require avoidance.” Presumably this should match the statement on page S-23, “Of the 14 cultural resource sites found along the corridor, 12 require avoidance and two sites should have cultural resource monitors during construction excavation.” [LTR 004]*

**Comment:** *Under the “Impacts During Construction” heading on page 3-84...The second sentence in the second paragraph states “Of the 14 cultural sites found, 12 require avoidance and two sites require avoidance.” This should be corrected. [LTR 007]*

**Comment:** *...the DEIS summary section (page S-23, second paragraph) indicates that two recently documented sites and one previously documented site require monitoring during construction excavation. Would these sites be avoided as indicated on page 3-84? [LTR 007]*

**Response:** A correction has been made to the first reference on page 3-84 that the two sites require monitoring, not avoidance.

A revision has been made to page 3-84, paragraph 3 of the draft EIS.

---

**Comment:** *The next sentence on page S-23 is, “Of the 10 previously documented cultural resource sites along the corridor, nine require avoidance and one site requires a cultural monitor during construction excavation.” Back on page 3-84, the corresponding sentence adds a clause: “one site requires avoidance plus a cultural resource monitor during construction excavation.” Will the tenth site be avoided or not? [LTR 004]*

**Response:** Yes, the site will be avoided.

---

**Comment:** *Without knowing the character of any of the previously recorded sites or which newly recorded sites will not be avoided, it is impossible to comment on the adequacy of the mitigation measures. Certainly it will not be acceptable for ground disturbing activities to take place in and around Site G, an ethnographic/ethnohistoric cemetery. [LTR 004]*

**Response:** No site-disturbing activities will take place in and around any site identified as eligible for listing in the National Register of Historic Places.

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**Comment:** *Does Bonneville plan to treat all of these sites as if they are eligible for inclusion in the National Register of Historic Places or will the cultural resources report make recommendations on determinations of eligibility? [LTR 004]*

**Response:** The Cultural Resources Technical Report will make recommendations on determinations of eligibility.

---

**Comment:** *We are also concerned about the newly recorded sites within existing roads. How will these sites be protected from further damage? [LTR 004]*

**Response:** Sites within existing roads will be avoided during construction associated with the McNary-John Day Transmission Line Project. Sensitive areas will be buffered against unnecessary access and cultural resource monitors, if necessary, will be present. All sensitive areas near proposed access roads were identified in the cultural resource technical report and discussed with Bonneville's road engineer. The laying down of rock to improve upon access roads in and around sensitive areas is one measure to be implemented to minimize the amount of subsurface disturbance.

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**Comment:** *Finally, on page 3-86 under Unavoidable Impacts Remaining after Mitigation, "In the absence of a programmatic agreement, any discovered cultural resources could be subject to mitigation through data recovery." We would like to be clear that we do not support total data recovery except as a last resort. [LTR 004]*

**Response:** Thank you for your comment. Data recovery is the last resort option. Site avoidance by tower, road, and staging area relocation is the preferred form of mitigation. In instances where construction activities are close to known cultural resources but not directly impacting the site, a cultural resource monitor should be present during all ground disturbing activities.

---

**Comment:** *The DEIS refers to field survey conducted for the project area (3-81), but an inventory report has not been submitted for BLM review. The information provided is insufficient to verify the APE identified, and the level and extent of inventory conducted for it. A complete inventory report is required to meet Section 106 requirements for the National Historic Preservation Act. Maps of the identified APE and area inventoried are needed. [LTR 007]*

**Response:** A copy of the draft Cultural Resources Technical Report will be forwarded to BLM as soon as it is completed.

---

**Comment:** *Were BLM lands inventoried [for cultural resources]? [LTR 007]*

**Response:** Yes.

---

## 4 Responses to Comments

**Comment:** *Did the contracting firm receive the required permits to conduct cultural inventory on Federal lands? [LTR 007]*

**Response:** The archeologist's team stayed on the existing right-of-way. In the places where Bonneville does not have existing right-of-way, Bonneville had permission-to-enter permits from landowners.

---

**Comment:** *What level of [cultural] inventory was conducted? LTR 007]*

**Response:** A reconnaissance level inventory was conducted during December 2001. Members of the Confederated Tribes of the Umatilla Indian Reservation subcontracted with Jones & Stokes to survey a portion of the right-of-way between the McNary Substation and the Benton/Klickitat County line.

Further surveys with the Yakama Nation were performed during June 2002. These findings were included in the Cultural Resources Technical Report.

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**Comment:** *Were [cultural] sites located on BLM administered lands? [LTR 007]*

**Response:** A known site was reidentified on what may be BLM land. Bonneville will be able to clarify this with the technical report.

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**Comment:** *Will the [cultural] sites be avoided by the proposed project? [LTR 007]*

**Response:** Sites will be avoided by the proposed project.

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**Comment:** *What are the proposed buffers around [cultural] sites that would be avoided? [LTR 007]*

**Response:** Offsets and buffers would be determined around previously recorded and newly identified archaeological sites based on Bonneville practices for avoiding adverse effects to historic properties, tribal concerns, and the Oregon and Washington SHPO concurrence.

An addition has been made to page 3-85, after bullet 7 of the draft EIS.

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**Comment:** *Which [cultural] sites would be monitored and what criteria is used for site selection? [LTR 007]*

**Comment:** *Under the "Impacts During Construction" heading on page 3-84, the last sentence of the first paragraph states that "Cultural resource monitors could be provided." Under what conditions would a monitor be employed in ground disturbing activities? [LTR 007]*

**Response:** Any construction activity in and around sites eligible for listing in the National Register of Historic Places would require a monitor. Sites to be monitored would be determined based on Bonneville practices for avoiding adverse effects to historic properties, tribal concerns and the Oregon and Washington SHPO concurrence.

Revisions have been made to page 3-85 of the draft EIS to clarify.

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**Comment:** *Why is a portion of the corridor planned for [cultural] re-survey under contract with the Yakama Nation? LTR 007]*

**Response:** It was agreed at a meeting in March 2001 that Bonneville, via Jones & Stokes, would contract with the Yakama Nation to assist on the cultural resources survey for the western two-thirds of the McNary-John Day Transmission Line Project. Delays in finalizing the contract caused delays in the production of the draft and final versions of the Cultural Resources Technical Report.

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**Comment:** *Are the identified TCP's within the APE? [LTR 007]*

**Response:** Yes. The Confederated Tribes of the Umatilla Indian Reservation completed their assessment of the McNary-John Day Transmission Line Project and concluded that there are TCPs within the project's APE. The Tribe has chosen not to nominate the TCPs to the National Register of Historic Places on the basis of site disclosure and the implications for drawing attention to sensitive cultural sites.

Warm Springs did not identify any TCPs within the APE. The Yakama Nation did not submit documentation in time for inclusion in the final EIS.

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**Comment:** *Have boundaries and supporting documentation been completed for the TCP's? [LTR 007]*

**Response:** The Confederated Tribes of the Umatilla Indian Reservation completed their assessment of the McNary-John Day Transmission Line Project and concluded that there are TCPs within the project's APE. The Tribe has chosen not to nominate the identified TCPs to the National Register of Historic Places on the basis of site disclosure and the implications for drawing attention to sensitive cultural sites.

Warm Springs completed their oral history study and did not identify any TCPs within the APE. The Yakama Nation did not submit documentation in time for inclusion in the final EIS.

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**Comment:** *Is future consultation and resurvey with the Yakama nation expected to identify additional TCP's? [LTR 007]*

## 4 Responses to Comments

**Response:** The Yakama Nation will be reporting on the oral history of the proposed project area and will be identifying TCPs along the corridor. Bonneville expects additional TCP's to be identified.

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**Comment:** *Has the eligibility of the properties been determined in consultation with the Native American Tribes, the Washington State Historic Preservation Office (SHPO), and if located on federal lands, the responsible agencies? [LTR 007]*

**Response:** Eligibility has not yet been determined. This topic has been addressed in the Cultural Resources Technical Report. An evaluation of the newly recorded properties' eligibility to the National Register of Historic Places has been provided in the Cultural Resources Technical Report, entitled *draft Archaeological Survey of the Bonneville McNary to John Day Transmission Line* (Jones & Stokes 2002). Information on site eligibility was gathered during joint field surveys with the CTUIR and the Yakama Nation during the fall 2001 field season and summer 2002. Sites identified during preliminary archaeological reconnaissance were field verified by the representatives of the Yakama Nation and the CTUIR. Site locations were discussed in relation to the proposed construction activities associated with building a 500 kV-transmission line over approximately 75 miles. Discussions with Bonneville's archaeologist, project manager, roads engineer, and construction engineer took place in order to avoid all sensitive sites.

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**Comment:** *Will the proposed project alternatives affect eligibility of the TCP's to the National Register or affect Native American access or use of the TCPs? [LTR 007]*

**Comment:** *Will the TCPs be avoided? Have effects to the TCPs been identified and are the mitigation elements identified on page S-24 adequate to mitigate these effects? [LTR 007]*

**Comment:** *Documentation and maps of the TCPs are needed to identify the location of the properties relative to the project, thereby permitting review of the contractor assessment of effects to these properties. [LTR 007]*

**Response:** This project will not impact the eligibility of any of the identified TCPs along the proposed route. A cumulative effect of the addition of a transmission line to the integrity of any identified TCPs would be judged on a case-by-case basis.

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**Comment:** *The mitigation section (page 3-85) lists consultation with Umatilla Tribes and the Yakama Nation regarding site monitoring, and for establishing consultation protocols for site mitigation and management. Why is the Warm Springs Tribe not mentioned? [LTR 007]*

**Response:** The Umatilla Tribes, the Yakama Nation, and the Warm Springs Tribes will be consulted through the duration of the project with regards to site mitigation and management.

A revision has been made to page 3-85, bullet item 6 of the draft EIS.

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**Comment:** *In instances of unanticipated finds, the text states that the tribes would be contacted. Neither SHPO nor the land management agencies are mentioned in this context. For public lands, both SHPO and BLM should be contacted in the event of inadvertent discovery of cultural resources. Similarly, consultation should be conducted with the tribes, SHPO, and BLM for cultural properties located on BLM administered lands. [LTR 007]*

**Response:** You are correct. The SHPO and the affected land management agencies would also be contacted in the event of an unanticipated find.

A revision has been made to page 3-86, bullet 9 of the draft EIS.

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**Comment:** *The fourth bullet under the mitigation heading on page 3-85 should be clarified. [LTR 007]*

**Response:** Thank you. The mitigation measure has been clarified.

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**Comment:** *Under the “Impacts During Operation and Maintenance,” heading on page 3-85, the last sentence in the first paragraph indicates review would be required if any maintenance activities need to occur outside of the tower locations or off access roads. More detail is needed on the type of review that would take place. Is consultation with tribes, SHPO or federal land management agency to be conducted as part of the review? [LTR 007]*

**Response:** Yes, consultation would be part of the review. Revisions and additions have been made to page 81, paragraph 1 of the draft EIS under “Impacts During Operation and Maintenance.” Further consultation with the appropriate state and federal agencies, including Washington OAHF, Oregon SHPO, the Yakama Nation, Warm Springs and Umatilla Tribes would take place if any maintenance activities need to occur outside of the tower locations or off the access roads.

A revision has been made to page 3-85, paragraph 2 of the draft EIS.

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## **Visual Resources**

**Comment:** *Bonneville should consider including maps that identify sections of SR14 where the proposed project would be visible. [LTR 008]*

## 4 Responses to Comments

**Response:** The resource maps located in various sections of the EIS indicate the proximity of the right-of-way to SR 14. Travelers on SR 14 would be in close proximity and would have unobstructed views of the line between corridor miles 0 and 16. Views of the line would be intermittent between corridor miles 16 and 79 due to the topography. See Chapter 3, Visual Resources, Travelers and Recreationists for a detailed description of views from SR 14.

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**Comment:** *Page 3-91 describes viewshed impacts from the proposed transmission line. The EIS should state whether those impacts would be significant or not. [LTR 008]*

**Response:** Bonneville assessed impacts to visual resources from the proposed action and alternatives in the Visual Resources section of the EIS. The discussion of impacts in this section clearly identifies the potential impacts from several sensitive viewpoints along the project corridor, as well as various other locations along the corridor. The EIS identifies the significance of the various visual impacts of the proposed action and alternatives in terms of context (e.g., the extent and duration of the impact) and intensity (e.g., the severity of the impact), which are used in the NEPA regulations to define significance.

---

**Comment:** *Is there a visual impact assessment of the line along highway looking at river? [PS]*

**Response:** Paragraphs 3 and 4 of Chapter 3, Visual Resources, Travelers and Recreationists, describe views of the line along SR 14 looking toward the Columbia River. Paragraph 3 of the same section describes views of the line from I-84 looking toward the Columbia River.

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### **Socioeconomics, Public Services, and Utilities**

**Comment:** *What happens to land values around new substations? [PS]*

**Response:** Bonneville is not proposing to construct any new substations for this project. Bonneville does propose to expand the McNary Substation by approximately 1.3 acres, but this will be on existing Bonneville property. In answer to your question, some short-term adverse impacts on property value and saleability may occur on an individual basis. However, these impacts are highly variable, individualized, and not predictable. The project is not expected to cause overall long-term adverse affects on property values along the existing and proposed right-of-way or adjacent to the existing substations.

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**Comment:** *Are there job opportunities associated with this project? [PS]*

**Comment:** *We would be happy to be involved in the construction of the McNary-John Day Project... Could you put me in the contract with the appropriate people.--Superior Electric [E-M 002]*

**Comment:** *Is there a process so that local people will be hired for this project? [PS]*

**Comment:** *If you don't hire local people, you'll have a problem ~ guaranteed! [PS]*

**Response:** Duke Energy would be the construction contractor responsible for building the line. Although Duke is based in Charlotte, NC, it will place a headquarters in the Tri-cities and hire from the local community. Duke's teammates, Henkels & McCoy, will hire linemen through union halls in Vancouver, WA and Portland, OR.

---

**Comment:** *What is the process the landowner can expect if we relocate the easement and move towers? [RS]*

**Comment:** *What's the process for paying on the additional right-of-way needed? [RS]*

**Comment:** *What is involved with getting right-of-way from landowner? [RS]*

**Response:** Bonneville would need to acquire some additional easements to build, operate and maintain the proposed transmission line facilities. Landowners would be contacted and offered fair market value for the easements, established through the appraisal process. The appraisal process takes all factors affecting value into consideration including the impact of transmission lines on property value. Upon receipt of a signed Contract and Grant of Easement, Bonneville records the easement and payment is made to the landowner.

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**Comment:** *The EIS should state how Bonneville will deal with owners refusing offers for right-of-way easements (e.g., by using alternative routes or exercising eminent domain). [LTR 008]*

**Comment:** *Can you condemn the Indian land? [RS]*

**Response:** To construct the proposed action, Bonneville would need to acquire the right to use various property along the transmission corridor through either purchases of rights-of-way easements or condemnation proceedings. Bonneville preference is to purchase the right-of-way easements through mutual agreement by Bonneville and the property owner and not through condemnation proceedings. It is not known at this time precisely which method Bonneville would use to acquire these rights for a particular property. Nevertheless, how Bonneville acquires these rights, by either purchase or condemnation, would not result in differing environmental effects meriting separate analyses under NEPA – i.e., the expected environmental effects would be the same regardless of the acquisition method used, and the effects related to acquisition are discussed in the Socioeconomics, Public Services, and Utilities section of Chapter 3 of

## 4 Responses to Comments

the EIS. However, the following discussion is provided for the information of the commenters.

If owners refuse Bonneville's offers to buy right-of-way easements, it is very likely that Bonneville will have to acquire the rights through condemnation. After a transmission line route has been selected and surveyed, it is usually not possible to use alternative routes to avoid areas where owners are not willing to sell right-of-way easements. This is particularly true of transmission line easements, but it generally is true of access easements as well. In some cases, feasible alternative means of access may be found.

---

**Comment:** *If construction is done in the fall, can landowner in Sherman County be compensated for hunting revenue? [LTR 005]*

**Comment:** *[I lease my land in the fall for exclusive rights to hunt. This project will disrupt this fall season, if... construction will begin on my property about October 2002]. Does Bonneville have a mechanism in place for you to apply for loss of income due to project? [PH 009]*

**Response:** Bonneville would coordinate its construction schedule with the concerns of the landowners to the extent practicable. Construction schedules may be limited by the opportunities to obtain outages on existing transmission lines. On other projects, some landowners have found it helpful to post signs, listing their telephone number, so that construction crews could contact them letting them know when they may be working in that particular area. Bonneville would not pay for loss of hunting revenues.

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**Comment:** *The EIS should state if the owners of parcels proposed to be crossed by the transmission line have been contacted by Bonneville and whether tentative agreements have been reached. [LTR 008]*

**Response:** The draft EIS, letters sent to landowners, public meetings, as well as one-on-one contacts made with some of the landowners are the mechanisms Bonneville used to keep landowners informed of the proposal to construct a new transmission line. The draft EIS states that landowners will be contacted and offered fair market value for any easements that need to be acquired. Once legal descriptions are completed, the appraisers will contact the landowners and offer them an opportunity to accompany them on the appraisal. The negotiator will then present the landowners with an offer of fair market value for the land rights needed. Tentative agreements have not been made since we are not far enough along in the process to make an offer.

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### Noise

**Comment:** *Because helicopters could potentially be used to install towers, the impact analyses in the EIS should reflect their use. [LTR 008]*



**Response:** Page S-32 and the noise section of Chapter 3 addresses construction, operation, and maintenance noise impacts as they relate to helicopter use. Mitigation measures are also provided.

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### **Public Health and Safety**

**Comment:** *Page S-34 states that predicted field levels are only indicators of how the proposed project may affect the magnetic-field environment. They are not measures of risk or impacts on health. The latter is what NEPA requires. The EIS should contain the best prediction of health risks based on available information. [LTR 008]*

**Response:** Appendix G, *Assessment of Research Regarding EMF and Health and Environmental Effects*, reviews numerous scientific research studies on the potential health affects of electric and magnetic field exposure. Because of the insufficient evidence and uncertainties regarding potential long-term health effects, Bonneville provides an assessment of EMF exposure by reporting the predicted field levels caused by proposed project alternatives. It would be speculative for Bonneville to attempt to predict possible health risks/impacts associated with these exposures when the scientific community, in the presence of such uncertainty, has been unable to do so.

---

**Comment:** *Page S-35 contains the following mitigation measure: crop dusting pilots planning to enter the area would take suitable precautions to avoid collision with the proposed transmission line. We recommend that this mitigation measure be rewritten to reflect an action that the lead agency could take (e.g., educate crop dusting pilots about the location of the proposed transmission line). [LTR 008]*

**Response:** The mitigation measure has been removed. Area residents are aware of the new line. Crop dusters would know how to deal with power lines in their work.

---

**Comment:** *Does the EIS address the alarms all along highway for Umatilla Gas Incinerator [PS]?*

**Comment:** *Put in contracts so that workers know about emergency preparedness. (Have small radios that will tell them what to do.) [PS]*

**Response:** Yes, the draft EIS describes the emergency preparedness program under Hazardous Materials on page 4-11 and includes a mitigation measure to inform the construction workers about the program (page 3-126).

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**Comment:** *Concerned about fires from problems with the line. [RS]*

**Response:** One potential issue for transmission lines starting fires is if vegetation is allowed to grow near the line; electricity can arc to the vegetation and start a fire.

## 4 Responses to Comments

However, Bonneville's vegetation management program ensures that the vegetation is kept at a safe distance for the line.

---

**Comment:** *Flash over due to bird droppings. [RS]*

**Response:** Heavy bird droppings on the insulators can create a path that bypasses the insulator, causing the electricity to arc. Where that becomes a persistent issue, Bonneville installs devices to discourage birds from nesting or perching on the tower.

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**Comment:** *Fires -- Any hint of negligence, and fire department will pursue and so will landowners! [RS]*

**Comment:** *Grass fires are fairly common. The railroad set a fire in August of 2001, sparks off the railcars. [RS]*

**Response:** Bonneville understands the extreme fire danger in this area. Bonneville will continue to enforce strict fire preventive measures on our employees and contractors.

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**Comment:** *Has a fire ever cut the wire in two? [RS]*

**Response:** No.

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**Comment:** *One gate is still sparking at 66/6 tower McNary-Ross. (Fence needs to be grounded, to do so, talk to maintenance.) [RS]*

**Response:** Bonneville's district foreman met with the landowner on site to assess the problems. The fence was grounded and the issue was resolved. If you receive shocks from fences or structures near a line in this area, please call the Walla Walla Regional Office at 509/527-6238 and they will get someone out to address the problem.

---

**Comment:** *How tall will the new towers be when you cross over to the south side of the highway? (sheet 68), We're concerned about clearance since we hay in this area. [RS]*

**Response:** If either the Hanford-John Day Alternatives B or C (south side alternatives) were selected, the proposed line would cross to the south side of the highway at the point you are describing. Exact towers heights have not been determined. However, the line would cross over the top of the existing lines and most lines provide adequate clearance for farming.

---

**Comment:** *In winter - Low fire hazard, but greater risk of damage to roads. [RS]*

**Response:** The project would be constructed throughout the year, weather permitting. Bonneville would take precautions for fire hazards in the summer/fall months and clean-up road or right-of-way rutting if winter construction.

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### **Cumulative Impacts**

**Comment:** *The EIS does not examine the foreseeable future actions associated with building the power line. For example, are future gas-powered electricity generators more likely to be located close to the power line, thus concentrating impacts from air emissions. The EIS should discuss foreseeable future actions associated with this project. [LTR 008]*

**Response:** Pages 1-5 through 1-7 of the draft EIS identify foreseeable future energy projects that would rely on the proposed project to convey electricity generated from those facilities. These projects are also identified on page 3-128 in the Cumulative Impacts section of the EIS. The impacts associated with those projects have been or are currently being analyzed in NEPA documents for those projects, and the cumulative impacts are discussed on pages 3-129 to 3-131 of the EIS for the proposed action.

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**Comment:** *It is difficult to evaluate impacts and develop suitable mitigation through a piecemeal approach whereby each project is considered individually and not in context with all Bonneville's proposals in south central and south eastern Washington. Independent biological assessments of the environmental impacts of multiple projects in shrub-steppe habitat often does not fully assess the combined cumulative effects on the landscape. [LTR 011]*

**Comment:** *We strongly advocate the development of a comprehensive mitigation banking plan which consolidates necessary mitigation for all proposed projects. Scientific literature indicates that shrub-steppe habitat owes a great deal of its functionality to large, contiguous blocks, and mitigation banking is a valid means of mitigating for loss of shrub-steppe vegetation. Mitigation from each proposed project could be banked to secure large blocks of relatively intact shrub-steppe habitat. The mitigation banking effort could be coordinated through Bonneville's existing Fish and Wildlife programs. [LTR 011]*

**Response:** Thank you for the suggestion. The infrastructure project managers and environmental leads are discussing this potential mitigation and your suggestions will be considered by Bonneville decision makers.

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